

ABSTRACT OF THE DISCLOSURE

A fuel cell system electrically couples a battery in parallel with the fuel cell stack to power a load. An operational condition of the battery is compared to a desired operating condition and a partial pressure of a reactant flow to at least a portion of the fuel cell stack is adjusted based on the determined amount of deviation. The operational condition can include voltage, charge of the battery. Individual fuel cell systems can be combined in series and/or parallel to produce a combined fuel cell system having a desired output voltage and current.

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